REMARKS

Claims 6-10, 16-20, and 26-48 are pending in the present application and were rejected in the Office Action dated February 4, 2009. Applicants have amended independent claims 31, 37, and 43 from which the remaining claims depend, amended claims 32, 38, and 44, and canceled claim 46. Therefore, Applicants submit that, based on the foregoing amendments and following remarks, pending claims 6-10, 16-20, and 2645, 47, and 48 are in condition for allowance.

Examiner Interview

The Applicants' undersigned attorney wishes to thank the Examiner Pannala for taking the time to conduct a telephonic interview on April 15, 2009. During the interview, the objection to the specification amendment, the Section 101 rejections, and the Section 103 rejections were discussed.

With respect to the objection to the specification amendment, the Examiner agreed that paragraph [0044] was correct, but that the amendment to paragraph [0057] was a reference to an incorrect paragraph. The amendment was intended for paragraph [0058], which Applicants have corrected herein.

With respect to the Section 101 rejections, the Examiner suggested amendments that would overcome the rejection. Applicants have accordingly made those amendments herein, as discussed further below.

With respect to the Section 103 rejection, the undersigned pointed out that several arguments from Applicants' previous response dated May 14, 2008 were not addressed in the present office action dated Feb. 4, 2009. The undersigned highlighted the arguments again in the interview. The Examiner requested the Applicants make a note of this in the present response. Furthermore, the undersigned presented proposed amendments to the claims and explained the distinctions from the prior art as a result of the amendments made herein, as discussed in more detail below.

Objection to the Specification Amendment

The specification amendment filed on 11/13/08 that included amendments to the specification stands objected to by the present office action. In particular, the office action asserts that the specification amendment introduces new matter into the disclosure. However, as discussed and agreed in the interview, the amendments do not add new matter as the changes made were editorial and not substantive. For example, the language that previously read "One alternative has…" in paragraph [0044] was corrected to say "One alternative is…" The other change was updating the language that previously read "the in-process API is fully symmetry…" to read "the in-process API is fully symmetrical…"

As discussed during the interview, the Applicants have resubmitted the portion of the specification amendment to properly reference paragraph [0058].

35 U.S.C. §101 Rejection

Claims 6-10, 16-20, and 32-42 stand rejected under 35 U.S.C. §101 for not being directed to statutory subject matter.

Claims 31, 6-10, and 32-36

The office action rejects ***claim 36*** for allegedly not falling within one of the four statutory categories of invention. As discussed during the interview, the Examiner intended this portion of the rejection to apply to independent claim 31, not dependent claim 36. Claims 6-10 and 32-36 were rejected for depending from the rejected claim 31. The Examiner suggested amendments to claim 31 that would overcome the Section 101 rejection of claim 31, and therefore claims 6-10 and 32-36 that depend therefrom. In particular, during the interview, the Examiner suggested amending claim 31 to incorporate a memory into the computer-implemented method. The Applicants have amended claim 31 accordingly and, thus, request reconsideration and withdrawal of the 35 U.S.C. §101 rejection of claim 31 and the claims 6-10 and 32-36 that depend therefrom.

The Examiner is encouraged to contact the undersigned attorney, Lori Anne D. Swanson (215.564.8997) to discuss the resolution of any remaining issues.

Claims 37, 16-20, and 38-42

The office action rejects claim 37 for allegedly being directed to non-statutory subject matter and rejects claims 16-20 and 38-42 for depending from the rejected claim 37. In particular, the office action rejects claim 37 for being directed to a software program embodied on a medium that a computer may access without realizing the functionality of a program.

During the interview, the Examiner clarified that claim 37 was rejected for not being embodied on hardware components. Applicants have amended claim 37 accordingly, namely to positively recite at least one processor and memory communicatively coupled to the at least one processor for realizing the functionality of the system. Accordingly, Applicants request reconsideration and withdrawal of the 35 U.S.C. §101 rejection of claim 37 and the claims 16-20 and 38-42 that depend therefrom.

35 U.S.C. §103 Rejection

Claims 6-10, 16-20, and 26-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,681,383 ("Pastor) in view of U.S.P.A. Pub. 2002/0059204 A1 ("Harris"). Claims 33, 39 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,681,383 ("Pastor) in view of U.S.P.A. Pub. 2002/0059204 A1 ("Harris") in view of U.S. Patent No. 7,020,660 ("Woodring").

Reply To Previous Office Action Response

At the outset, and as discussed during the interview, Applicants would like to point out that there is no apparent consideration in the instant Office Action for several of the remarks made in Applicant's response (dated August 14, 2008) to the previous Office Action (dated May 4, 2008) with respect to the 35 U.S.C. §103 rejection.

Applicants recognize and thank the Examiner for clarifying the Examiner's interpretation of .NET managed code in the present office action (Office Action dtd. 2/4/09, page 8). However, in Applicants' 8/14/08 response, Applicants pointed out numerous distinctions between the claims and the cited art, using specific examples and citations. In the instant Office Action however, the same art is used to support rejection of the same

claimed subject matter, without consideration or a response to Applicant's previous remarks. For example, the office action does not appear to give consideration to Applicants remarks provided in the 8/14/09 response regarding the cited portions of Pastor and the failure for these portions to teach or even suggest the claim element it is used to reject, e.g., nowhere does Pastor say anything about "invoking … an invocation context in the database server." It is not known if the remarks provided in the 8/14/08 response were considered and found not persuasive, or, at least in part, overlooked. Thus, Applicants are unclear as to how to respond and some of the previous remarks are repeated in part herein.

Claims 6-10, 16-20, 26-48

Independent claims 31, 37, and 43, from which the remaining claims depend, are directed to invoking .NET managed code and an invocation context in a database server, exposing the invocation context to the database server through the user of an in-process provider, and executing the .NET managed code based on the invocation context. While Applicant's submit the claims are allowable in their present form, Applicants have amended the claims to more clearly point out the distinctions between the claim elements and the cited art.

At the outset, with respect to the rejection of independent claims 31, 37, and 43, the office action asserts that Pastor teaches "invoking .NET managed code and an invocation context in the database server." The office action cites Pastor's generation of a software application from formal requirements as teaching the claim element and cites Pastor's application source code written in Visual Basic. The only response to the Applicant's previous remarks that is addressed in the present office action, with respect to the 35 U.S.C §103 rejection, is the statement that .NET is interpreted as being based on Visual Basic VB and that VB is a part of the programming language in .NET managed code (Office Action dtd. 2/4/09, Response to Arguments, page 8).

However, without prejudice or disclaimer, Applicants submit that even if .NET managed code and Visual Basic VB were interpreted to be one in the same, as previously explained in Applicant's 8/14/08 reply, nowhere does Pastor teach invoking managed code or

an invocation context ***in the database server***. In fact, it is not clear why Pastor would invoke the code much less invoke an invocation context in the database server because, as recognized by the office action, Pastor does not teach executing code in the DBMS. Rather, Pastor describes developing application code, and developing the code separately from the database system. In contrast to the claims, Pastor's database system is described merely as tables for storage. Applicants submit that just because a database system can execute scripts, this does not teach the execution of application code in the database server much less does it teach invoking an invocation context in the database server for such execution. Thus, nowhere does Pastor teach invoking an invocation context, and nowhere does the office action provide an explanation for where or why an invocation context would be invoked in the database system of Pastor.

To make the distinction more clear, Applicants have amended each of the independent claims to recite "wherein the invocation context provides access to a client's connection context," "exposing the client's connection context," and "wherein the code is executed under the client's connection context." As described in the specification of the present application, managed code may be invoked in the database server based on a user's, *e.g.*, client's, action. Since the execution of this code is requested as part of the client connection, the code running in the server needs access to the caller's context (Specification, para. [0047]).

In contrast to the claims, Pastor uses a user-interface translator to translate service calling into invocation to system-logic services (Pastor, col. 34, lines 30-32). Any reference to an invocation in Pastor is not with respect to the database or invoking the invocation context in the database. Thus, not only does Pastor ***not*** teach the invoking of the invocation context in the database server, Pastor does not teach that an invocation context provides access to a client's connection context. In particular, it is not clear from Pastor, or any of the sections of Pastor cited in the office action, how or even why Pastor's system would invoke an invocation context in the database as claimed.

Therefore, Applicants respectfully submit that independent claims 31, 37, and 43 patentably define over Pastor and Harris does not cure the deficiencies of Pastor. As claims

6-10 and 32-36 depend from claim 31, claims 16-20 and 38-42 depend from claim 37, and claims 26-30 and 44-48 depend from claim 43, Applicants further respectfully submit that claims 6-10, 16-20, and 32-43 patentably define over the references as applied.

Accordingly, Applicants respectfully submit that the present claims patentably define over the cited reference and request reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a).

Furthermore, the office action asserts that Harris teaches exposing the invocation context to the database server through the user of an in-process provider and executing .NET managed code in the database server based on an invocation context (Office Action, page 5). As stated above, the office action repeats the same rejection of the claims as set forth in the previous office action dated May 14, 2008 without addressing the Applicants remarks in the previous reply dated August 14, 2008. Thus, it is not clear that Applicants remarks were considered.

In particular, Harris makes no mention of *exposing an invocation context* or executing .NET managed code in the DBMS *based on that invocation context*. The Office Action states that accessing information from suppliers in response to a buyer's requirements would be obvious by combining Pastor and Harris (Office Action, page 5). However, as previously stated, Applicants are unclear as to the relevance of accessing information from suppliers in response to a buyer's requirements to the claimed method of executing managed code in a database server. Thus, Applicants submit that the claimed elements are not made obvious in view of Pastor or Harris, alone or in combination.

Furthermore, the office action cites the description in Harris (Harris, paras. [0074] and [0062]) of an application that resides on a web server. However, as previously described, Harris' web server is ***distinct*** from the database server that is part of the claimed DBMS, and thus, Harris does not teach the execution of .NET managed code ***in the DBMS***. Harris, at best, describes the ***out-of-process*** execution of code as it existed in the prior art. Applicants recognized that such out-of-process execution of code is not always desirable, and claimed a

solution that is distinct from prior art systems such as that described in Harris. Thus, any reference to an execution of .NET managed code between the interface of Harris' web server and an API that ultimately sends a customized query to Harris' DBMS does *not* teach a the execution of managed code ***in the database server.*** In particular, Harris' out-of-process execution of code results in queries sent ***to*** the database, but does not result in execution of the code ***within*** the database. Thus, Harris does not teach the execution of "the .NET managed code in the database server based on the invocation context."

To further clarify the distinction between Harris and the claims, Applicants have amended the claims to recite exposing the client's connection context and executing the .NET managed code in the database server based on the invocation context, wherein the code is executed under the client's connection context. Nowhere does Harris teach the execution of *code in the database server* and further, nowhere does Harris teach the execution of such code *under the client's connection context*.

Claims 6-10, 16-20, and 26-42

If a new rejection is issued, Applicants respectfully request further explanation as to the rejection of claims 6-10, 16-20, and 26-42 under 35 U.S.C. §103(a), as the office action only states the claims are rejected without providing further details. Thus, Applicants are not certain if the previous rejection of these claims stand, or if the claims are rejected only for depending from a rejected claim and would be allowable if written in independent form with the features of the claims from which they each depend.

Claims 43, 26-30 and 44-48

Furthermore, while Applicants regard the claims to be patentable over Pastor in their present form based on the foregoing reasons, Applicants amended claim 43 to recite receiving application code, written as .NET managed code, from an application, and separating the .NET managed code into an immutable part and a mutable part. Applicants submit that nowhere do the cited references teach the receipt of application code. Applicants have also

incorporated the features of now canceled claim 47 into claim 43 to recite separating the .NET managed application code into an immutable part and a mutable part, and executing the code in the DBMS based on the results of the separation. The Office Action asserts that Pastor taught the features of claim 47 that are now incorporated into claim 43. Applicants respectfully disagree.

In particular, Applicants submit that none of FIG. 4, page 6, or paragraph [0062] of Pastor teach or suggest the recited claim elements, and nowhere else does Pastor teach or suggest such elements. Rather, Applicants cannot find any portion of Pastor that describes the separation of .NET managed application code into an immutable part and a mutable part. Thus, Pastor does not teach "separating said .NET managed application code into an immutable part and a mutable part" and "executing said .NET managed application code in said DBMS; executing based on the results of said separation."

Claims 33, 39, 45

The Office Action asserted Pastor, in view of Harris and Woodring against claims 33, 39, and 45, which depend from claims 31, 37, and 43, respectively. Applicants submit that Woodring does not cure the deficiencies of Pastor and Harris as discussed above. In particular, Woodring, like other prior art systems, is directed to generating source code via an out-of-process application interface that is used to target a DBMS and does ***not*** teach a method of executing .NET managed code ***in*** the database server in the manner claimed.

Accordingly, Applicants submit that neither Pastor nor Harris nor Woodring, alone or in combination, teach any of the features of the presently pending claims. Because claim 31 patentably defines over Pastor, Harris and Woodring, claims 6-10 and 30-37 that depend from claim 31, claim 37 and claims 16-20 and 38-41 that depend from claim 37, and claim 43 and claims 26-30 and 44-48 that depend from claim 43, are likewise allowable.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that the canceled claims obviate the rejections and the added claims are allowable. Applicants submit that the present application is in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully requested. The Examiner is encouraged to contact the undersigned attorney, Lori Anne D. Swanson (215.564.8997) to discuss the resolution of any remaining issues.

Regards,

Date: May 4, 2009

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